

**ABSTRACT OF THE DISCLOSURE**

A system for creating at a computer workstation a graphical description of the architecture of a simulation of a real-world system. The system of this invention generally includes a standardized set of pre-defined graphical node and arc elements that represent real system hardware and software processes and the relationships between them; a parameter data input window for further defining any desired graphical node and arc element; a graphical user interface for definition, selection, and arrangement of the graphical node and arc elements; and one or more simulation architecture data files for describing the total simulation architecture arrangement. Although the invention represents software processes as stated above, it also represents processes that occur in the real-world systems being modeled by the simulation that is graphically represented by the invention. In one embodiment of the invention, a user may group graphical node and arc elements into a summary construct called a "container," which allows the user to simplify the graphical representation of the simulation. Using the above-defined components of the invention, a user may graphically represent any simulation architecture, existing or non-existent, simple or complex, at different levels of abstraction.